

**CURRENT-SENSE BIAS CIRCUIT FOR A MAGNETORESISTIVE HEAD  
AND METHOD OF SENSING A CURRENT THERE THROUGH**

**ABSTRACT OF THE DISCLOSURE**

The present invention provides a current-sense bias circuit for use with a magnetoresistive head. In one embodiment, the current-sense bias circuit includes a voltage biasing portion configured to provide a bias voltage across the magnetoresistive head thereby establishing a bias current through the magnetoresistive head. Additionally, the current-sense bias circuit also includes a current sensing portion coupled to the voltage biasing portion and configured to sense a change in the bias current based on a resistivity change of the magnetoresistive head.